



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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Certified Mail Number: 7015 0640 0005 7966 4514, return receipt requested.

Ms. Samantha V. Gia,
Environmental Coordinator
Lane Construction Corporation
P.O. Box 491
Westfield, MA 01086

RE: **BAW - WESTFIELD**
311 East Mountain Road Facility
Transmittal No. X267694
Facility ID No. 130986
Application No. WE-15-013

CONDITIONAL PLAN APPROVAL

Dear Ms. Gia:

The Massachusetts Department of Environmental Protection, ("MassDEP"), Bureau of Air and Waste, has completed its review of your Non-Major Comprehensive Plan Application ("Application") listed above. This Application concerns the proposed reconstruction and operation of a hot mix asphalt ("HMA") plant at the referenced site. The new plant components include a counter-flow drum mixing plant, 100 million British thermal unit ("MMBtu") burner, a 90000 cubic feet per minute bag-house, thirty (30) foot exhaust stack, control tower and dust silo, as well as all necessary reconfigurations to piping, feeder conveyors any other ancillary facility hardware required for the reconstruction. All other emission capture and control equipment and management practices shall remain in place. The submitted Application was prepared by Lane Construction Corporation ("Lane Construction") and bears the seal and signature of David P. Horowitz, Massachusetts P.E. No. 46271.

The application was submitted in compliance with MassDEP Air Quality regulation 310 CMR 7.02 pursuant to M.G.L 111 Section 142 A-O, with an effective date of November 12, 2015. An Administrative Completeness letter was issued to you regarding this application on December 4, 2105. Additional information was received on January 27, 2016 pursuant to a request from MassDEP to resolve minor technical inconsistencies observed during the technical review. All updated information was incorporated into the application package and this document.

As a result of the final technical review, MassDEP determined that your Application is complete and that the Application, Specifications, and Best Management Practices for operations,

monitoring and recordkeeping of the equipment are in conformance with the current air pollution control regulations and “state of the art” engineering practices, and hereby grants this Plan Approval, file number WE-15-013, subject to the terms and conditions listed herein.

1. DESCRIPTION OF FACILITY AND APPLICATION

HISTORY

Lane Construction will produce bituminous concrete at the approved facility. The proposed equipment will be constructed on the property that currently operates as an asphalt batch plant and did include similar equipment and processes in the same location pursuant to MassDEP Plan Approval number WE-12-001.

NEW EQUIPMENT

The plant configuration is capable of producing 400 tons of HMA per hour. Lane specifies that the plant will operate at up to 400 tons per hour (“tph”), not to exceed 650,000 tons per year (“tpy”). All of the new equipment comprising Emission Unit One (EU-1) to be installed pursuant to this Approval are supplied by ASTEC. The facility components include:

- 1) drum plant Model D-UCF-11454 Unified Counter flow Drum Mixer,
- 2) Phoenix Talon™ burner Model PT2-100, rated at 100 MMBtu/hour which can utilize gas, and heavy oil,
- 3) baghouse Model RBH-90W, which is rated for 90,569 cubic feet per minute air flow.
- 4) a thirty (30) foot tall unlined stack with an interior diameter of 55.713 inches.

OPERATIONAL PARAMETERS

Lane indicates that the plant shall be limited in its production to 650,000tpy. Operated at 400tph yields 1625 hours of production per year. In this instance a year refers to any twelve (12) month consecutive rolling period. There are no lower limits on the production rate below 400tph or fuel usage rate of 100MMBtu/hour.

EMISSION LIMITATIONS

The burner can operate on natural gas, or oil. The application indicates ultra-low sulfur diesel (fuel oil) (“ULSD”) or recycled fuel oil (“Spec. Oil”) will be used as back up fuels. Maximum sulfur content of oil fuels are 0.0015 % by weight for ULSD and 0.5% by weight for Spec. Oil.

To meet BACT, emissions were calculated using the most conservative of either AP-42 or data supplied by the manufacturer for the chosen burner and each of the three fuels at maximum burner capacity, at maximum annual production of 650,000tpy and a maximum operational rate of 400tph. All emission limits are provided in Table 2, below.

BAGHOUSE AND EXHAUST HANDLING

Exhaust gases from the dryer drum will be vented through a new baghouse dust control system. The baghouse will utilize 1520 tube filtration units, four and five-eighths (“4 & 5/8ths”) inches in diameter and ten (10) feet long resulting in a cumulative filter area of 18,404 square feet.

Lane expects the air flow to be approximately 74,000 actual cubic feet per minute (“acfm”) or 37,677 dry standard cubic feet per minute (“dscfm”) when corrected for pressure and temperature. Pressure drop will be maintained between 2-6 inches of water column across the filter by implementation of variable frequency pulse jet cleaning system.

The air handling system for the bag house will be an ASTEC model BCS542 variable frequency exhaust fan driven by two 250 horsepower electric motors to maintain a velocity of 5.1 feet per minute. The exhaust will discharge to a vertical stack with an exit diameter of 55.731 inches and discharge at a height of thirty (30) feet above ground. The exhaust gas will discharge from the stack at a velocity of approximately 72.8 feet per second (fps) at a temperature of 240 degrees Fahrenheit.

NOISE

Noise emissions from the facility have never been reported to have created a nuisance problem. The new burner, ASTEC PT2-100, includes a dissipative silencer and is purported to be quieter during operation when compared to the previous burner. All other noise generating equipment should remain at levels equivalent to the previous operation.

2. EMISSION UNIT IDENTIFICATION

The equipment described below replaces existing equipment at the site and is known by Lane as Plant #19. It is currently referred to as Emission Unit-1 (“EU-1”) and is subject to and regulated by this Plan Approval.

Table 1			
EU	Description	Design Capacity	Pollution Control Device (PCD)
1	ASTEC Counter flow drum mix plant	400 tph	baghouse Low-Nox burner
	ASTEC Phoenix Talon 2-100 burner	100MMBTU/Hour	no
	ASTEC RBH 90W baghouse	90,560 cfm	no
	Unlined Exhaust Stack	Height - 30 feet Exit Diameter -55.731inches Flow rate - 72.8 fps Temperature - 240 degrees F	no

Table 1 Key:

EU = Emission Unit
tph = tons per hour
cfm = cubic feet per minute
F = Fahrenheit

PCD = Pollution Control Device
MMBtu = million British thermal units
fps = feet per second

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

Table 2			
EU	Operational / Production Limits	Air Contaminant	Emission Limits
			<u>incremental limits</u> <u>annual limits</u>
1	400 tph-plant max. (hot mix asphalt) 650,000 tpy-permit max. (hot mix asphalt) 100MMBtu/hour maximum burner output (applicable to all fuels)	PM	0.01gr/dscf 2.62 tpy
		NO _x	0.11 lbs/MMBtu - all fuels 8.9 tpy
		SO _x	0.014 lbs/MMBtu - natural gas 0.0008 lbs/MMBtu - ULSD 0.26 lbs/MMBtu - Spec. Oil 21.2 tpy
		CO	0.39 lbs/MMBtu - all fuels 31.7 tpy
		VOC	0.128 lbs/MMBtu - all fuels 10.4 tpy
		HAP (single)	0.0031 lbs/ton - all fuels 1.08 tpy
		HAP (total)	0.0087 lbs/ton - all fuels 2.83 tpy

Table 2 Key:

tpy = tons per year (any rolling 12 month period)
EU = Emission Unit
HAP = hazardous air pollutant
NO_x = nitrogen oxides
SO_x = sulfur oxides
CO = carbon monoxide
tph = tons per hour
VOC = volatile organic compounds
ULSD = Ultra Low Sulfur Diesel
gr = grains
PM = particulate Matter (total of all size particulates)

Spec. Oil = Used Recycled Fuel Oil
PM_{2.5} = particulate matter no larger than 2.5 microns in diameter
PM₁₀ = particulate matter no larger than 10 microns in diameter
MMCF = million cubic feet
dscf = dry standard cubic feet
lbs = pounds
HAP = Hazardous Air Pollutant
max. = maximum

B. COMPLIANCE DEMONSTRATION

Lane (“The Permittee”) is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 for Emission Unit-1 (“EU-1”):

TABLE 3	
MONITORING AND TESTING REQUIREMENTS	
EU-1	1. Lane shall conduct initial emissions compliance testing to demonstrate compliance with the short term emission and opacity limits contained in Table 2. The ability of the facility to achieve and maintain emissions and opacity at or below the limits stated in this Conditional Approval shall be demonstrated to MassDEP within one hundred twenty (120) days of the commencement of continuous operation of EU-1.
	2. This compliance testing shall be performed on a date which can be witnessed by MassDEP personnel at a mutually agreeable time and date.
	3. A written pretest protocol must be submitted to this Office for MassDEP approval at least 30 days prior to any required compliance test. The pre-test protocol shall include, but not be limited to, a description of: the emission compliance testing program proposed, applicable emission limits for which testing and demonstration of compliance is required, sampling point locations, sampling equipment, analytical procedures, proposed test methods, the proposed operating conditions for the required testing and identity of the independent third party testing company.
	4. A final emission compliance test results report shall be submitted to this Office within 45 days after the completion of each required compliance test. The final emission compliance test report shall include, but not be limited to a description of: the emission compliance testing program conducted, applicable emission limits for which testing was required and a summary of test results demonstrating compliance and/or noncompliance with applicable limits, sampling point locations, sampling equipment, analytical procedures, actual test methods used, and the actual operating conditions for which the testing was conducted.
	5. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13
	6. Lane shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	7. In accordance with Regulation 310 CMR 7.04(4)(a), the subject combustion unit shall be inspected and maintained in accordance with the manufacturer's recommendations and tested for efficient operation at least once in each calendar year.
	8. Lane shall annually conduct a “visolite” leak detection test on EU-1 prior to the start of the operating season. Additional tests shall be performed as needed to locate leaks, bag failures or other problems with normal operation of the control device
	9. Lane shall monitor the sulfur levels in all fuel oils received and used, including dates, times and volumes.
	10. Facility personnel shall, at a minimum, conduct a daily inspection of all air pollution control equipment and related operations and activities. In addition, the plant operator

	shall routinely observe the discharge stacks during operation of the subject equipment.
EU-1	11. Lane shall have readily accessible on-site at all times, the minimum number of replacement filter bags for the baghouse, as recommended by manufacturer specifications. If there are no manufacturer recommendations, then at least three (3) shall be maintained on site.
	12. All corrective actions undertaken by Lane under alarm conditions shall be explicitly stated in the facility's Standard Operating and Maintenance Procedure (SOMP).
	13. Lane shall monitor and operate the silo loading and truck filling operations to prevent fugitive VOC emissions.
	14. Lane shall demonstrate the continued ability of the subject equipment to maintain emission rates at or below the short term emission limits as stated in Table 2 through an emission compliance retesting program, on a triennial basis. Any deviation from this schedule shall be approved by MassDEP.
	15. Operate and maintain inlet gas temperature and pressure differential monitoring system of the baghouse, which includes an instantaneous reading of the temperature and differential pressure in the plant operator's control station. Audible and visual alarms shall be present to signal the need for corrective action in the event the temperature or pressure are outside the limits of normal operation established by the submitted operational procedures, this Conditional Approval, manufacturer specifications or through compliance testing results.

TABLE 4	
RECORD KEEPING REQUIREMENTS	
EU-1	1. Lane shall maintain the results of inspection, maintenance, and testing performed in accordance with Regulation 310 CMR 7.04(4)(a) and this Plan Approval on-site for five (5) years.
	2. Lane shall maintain records for process operations, the type of fuel burned, the sulfur content of fuel oil used, and actual fuel usage, the hours of operation, raw material usage, and the amount of product produced in the subject unit. Further, the equations utilized to calculate emissions from the subject equipment, as well as the resultant emissions, shall be included in these records.
	3. All emission monitoring and fuel usage records shall be kept on daily, monthly and rolling 12 month basis, as specified, without exception.
	4. Records of all compliance testing shall be maintained on-site for MassDEP such as all visolite testing performed, replacement of leaking filter bags, daily equipment inspections, stack test results, burner tuning, opacity readings, fuel content, efficiency and daily usage.
	5. Permittee shall maintain adequate records on-site to demonstrate compliance status with the operational, production and emission limits requirements contained in Table 2, above. Records shall also include the actual emissions of air contaminants emitted for each calendar month and for each consecutive 12 month twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15 th day following each month. An electronic version of the MassDEP approved recordkeeping form, in Microsoft Excel format, can be downloaded at: http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping
	6. Lane shall maintain records of monitoring and testing as required by Table 3.
	7. Lane shall maintain a copy of the Plan Approval, underlying Applications and the most up to date SOMP for EU-1 approved herein on site.
	8. Lane shall maintain a record of all malfunctions of EU-1 and associated air pollution control equipment; including at a minimum the date and time of corrective actions were initiated, and the date and time the corrective actions were completed.

TABLE 5	
REPORTING REQUIREMENTS	
EU-1	<p>1. Within one hundred eighty (180) days of the date of completion of installation and commencement of continuous operation of the new drum mix plant and associated pollution control equipment, Lane shall submit to MassDEP, for approval, the updated SOMP for the facility, which includes but is not limited to, the operating parameters established by the manufacturer, the facility, and as a result of testing, start-up and maintenance procedures of pollution control equipment, emergency measures to be taken should either the subject equipment malfunction and all required record keeping procedures. Lane shall operate the facility in accordance with its SOMP. Future updates to the SOMP shall be submitted to MassDEP within thirty (30) days of said revisions. The updated SOMP shall supersede prior versions of the SOMP and shall include all equipment approved herein.</p>
	<p>2. Lane shall submit to MassDEP all information required by this plan approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification Statement as provided in 310 CMR 7.02(2)(e).</p>
	<p>3. Lane shall submit, in writing, any Exceedance Report to MassDEP should the facility exceed any limitation/restriction established in Table 1 of this Approval. Said Exceedance Report shall be submitted within seven (7) days of determination of the exceedance of the limitation/restriction. The Exceedance Report shall include identification, duration, and reason for the exceedance, and the remedial action plan to prevent future exceedances.</p>
Facility Wide	<p>4. Lane shall accurately report to MassDEP in accordance with 310 CMR 7.12, all information as required by the annual Source Registration/Emission Statement Form. The facility shall note any minor changes, which did not require Plan Approval (under 310 CMR 7.02, 7.03, etc.) therein.</p>

4. SPECIAL TERMS AND CONDITIONS

Lane shall comply with the following Special Conditions contained in Table 6, below:

TABLE 6	
SPECIAL TERMS AND CONDITIONS	
CONTROL OF FUGITIVE PARTICULATE EMISSIONS	
Facility Wide	1. Lane shall monitor aggregate stockpiles and all roadways for fugitive emissions and take action in accordance with Best Management Practices (BMP).
	2. Lane shall ensure that all incoming loads of bulk raw materials (aggregate, RAP etc.,) are covered until dumping to prevent the release of emissions.
	3. Lane shall maintain speed limit signs on roadways and take appropriate action in accordance with BMP's when vehicles appear to be operating above 10 mile per hour limit.
	4. Lane shall keep all facility road beds in good condition, swept if paved, and/or wetted as applicable.
	5. Lane shall keep all raw materials storage piles watered as necessary, and shall keep all drum mix feed conveyors enclosed at all times to minimize fugitive particulate emissions.
	6. Lane shall employ BMP's to minimize fugitive particulate emissions from the facility.
	7. Lane shall utilize non-volatile release agents for the trucks, require that all trucks cover their loads as quickly as possible after loading.

TABLE 7	
EXHAUST STACK	
EU-1	1. The exhaust stack shall be constructed to the dimensions and specifications described in this Plan Approval and the Application.
	2. Changes in the stack construction shall require written approval from MassDEP prior to making any changes.
	3. The exhaust passing out the stack shall meet the operating criteria listed in the Application and the Plan Approval.
	4. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including, but not limited to, rain protection devices known as "shanty caps" and "egg beaters."

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

	TABLE 8
	GENERAL CONDITIONS OF OPERATION
EU-1	1. This Plan Approval consists of the Application materials and this Approval letter. If conflicting information is found between these two documents, then the requirements of the Plan Approval shall take precedence over the documentation in the Application materials.
	2. This Approval does not negate the responsibility of the facility to comply with this or any other applicable federal, state, or local regulations now or in the future. Nor does this Approval imply compliance with this or any other applicable federal, state, or local regulations now or in the future.
	3. This Approval may be suspended, modified, or revoked by MassDEP if, at any time, MassDEP determines that the facility is violating any condition or part of this Approval or if work has not commenced within two years for the date of issuance of this Plan Approval or if the construction work is suspended for one year or more.
	4. Failure to comply with any of the above stated conditions will constitute a violation of the "Regulations", and can result in the revocation of the Approval granted herein and/or other appropriate enforcement action as provided by law.
	5. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
Facility Wide	6. Should any nuisance condition(s), pursuant to 310 CMR 7.01, 7.02, 7.09, 7.10, including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the facility, then the facility shall immediately take appropriate steps to abate said nuisance condition(s).
	7. The facility shall allow MassDEP and USEPA personnel access to the site, buildings, and all pertinent records at all reasonable times for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
	8. If asbestos removal will occur as a result of the approved construction, reconstruction or alteration of this Facility, the Permittee shall ensure that all removal of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
	9. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction reconstruction or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 301 CMR 7.09(2) and 310 CM R 4.00.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Approval, please contact Bob Shultz at 413-755-2210, or in writing at the address on the letterhead.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Date: February 17, 2016

Marc Simpson
Permit Chief
Bureau of Waste Prevention

ecc: P. Czapienski: DEP/WERO
Yi Tian, Marc Wollman: DEP/Boston